# Women to the Rescue: Is There a Glass Cliff in Politics?

by

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## Abstract

Over the past decade, organisational research has found that women do not only face invisible obstacles as they climb up the career ladder, but that, even when they shatter the glass ceiling, they tend to be preferentially selected to precarious leadership positions. This phenomenon has been called the "glass cliff," alluding to the idea that women are perched on an (invisible) cliff and may fall off at any point. This thesis contributes to the existing research by examining whether women also face a glass cliff in the political sphere. More precisely, I argue that women are more likely to be selected as local and national party leaders when a party has been performing poorly in previous elections. However, I expect the glass cliff effect to vanish when female leaders are associated with that poor performance. To test these hypotheses, I use archival data on national party leaders in fourteen countries as well as data from an experiment on Amazon MechanicalTurk on local party leader elections. The generalised estimating equation models (GEE) of the archival data do not provide sufficient evidence for the existence of a glass cliff. The same applies to the experimental study which finds a difference in the choice of party leaders between men and women, but that effect is not dependent on the performance of a party. The candidate evaluations provide some preliminary evidence that female candidates are evaluated more positively when a party is performing poorly.

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# 1 Introduction

Women have caught up with and frequently overtaken men in areas of educational participation and performance in middle- and high-income countries, yet their advancement to leadership positions in the corporate world remains difficult (Pekkarinen 2012). Even when women show superior experience and qualifications, their climb up the career ladder is blocked by invisible (glass) yet real barriers (ceiling). Social theories suggest that people still implicitly associate leadership and competence with masculine characteristics which (i) can lead women to experience a "psychological glass ceiling" by making them think that they are not qualified for a leadership position and (ii) can bias leadership appointments and evaluations towards male candidates (Frankforter 1996; Heilman 2001; Smith, Caputi, and Crittenden 2012). The fact that women continue to be responsible for the majority of unpaid work may also prevent them from applying for demanding positions (Hewlett, Luce, and West 2005). Even if women overcome these barriers and apply to leadership positions, they may still face hurdles during the application process. For instance, recruiters may be biased by a similarity-attraction effect whereby they tend to recruit or promote employees who are similar to them (Ostroff and Judge 2012). Given that the higher ranks in the corporate world are still primarily dominated by men, this can lead to a vicious cycle in which men persistently appoint or employ other men.

Over the years, various social policies and leadership programmes have been implemented to remedy the gender imbalance in leadership positions (Teigen 2012). While some progress has been made, the gender gap remains wide in the corporate sphere. In Standard and Poor's 500 companies, for example, only 5.2% of CEOs are female, 21.2% of board

seats and around one quarter of senior level positions are occupied by women (Catalyst 2017). Organisational research has shown that even if women break through the "glass ceiling" and reach high rank positions, their leadership positions also differ in qualitative terms (Ryan and Haslam 2005). It is therefore important to go beyond the glass ceiling by further examining under which conditions women receive high-ranking positions, which positions they are offered and how female leaders are evaluated once they have reached the top. With regards to the type of positions, Ryan and Haslam (2005) have already observed that women are more likely to be appointed to leadership positions when an organisation is in a period of poor performance; a phenomenon which they have named the "glass cliff." While the glass cliff literature is still in its infancy, there is a growing awareness that this metaphor has uncovered another obstacle women may have to face as they make their way to the top.

Most of the glass cliff literature has focussed on testing the phenomenon with archival and/or experimental data (Adams, Gupta, and Leeth 2009; Brown, Diekman, and Schneider 2011; Cook and Glass 2013; Hennessey, MacDonald, and Carroll 2014; Hunt-Earle 2012; Mulcahy and Linehan 2014; Ryan and Haslam 2005; Ryan, Haslam, and Kulich 2010). Recently, several studies have had a closer look at the exact mechanisms that give rise to the glass cliff (Brown, Diekman, and Schneider 2011; Bruckmüller and Branscombe 2009; Gartzia et al. 2012; Rink, Ryan, and Stoker 2012; Rink, Ryan, and Stoker 2013; Ryan et al. 2011). Heilman (2001) suggests that humans have a "think crisis-think female" mindset which leads them to prefer female leaders in precarious situations. While male attributes (aggressiveness, independence and decisiveness) are seen as preferable when an organisation is performing well, female attributes (kindness, sympathy and cooperation) are more appreciated in times of crisis (Heilman 2001). A second explanation, called "think crisis-think not male," suggests that rather than women being preferred in crisis situations, there is a reluctance to endanger a man's career by appointing him to a badly

performing organisation (Ryan et al. 2011). This explanation is grounded in psychological research on in-group biases which suggests that humans tend to view and treat members of their own group more favourably (Rudman and Goodwin 2004). While women are also affected by in-group biases, they are more likely to view precarious leadership positions as an opportunity for their fellow group members due to their underrepresentation at the top (Hunt-Earle 2012). Brown, Diekman, and Schneider (2011) further propose that struggling organisations may simply wish to signal change, both internally and externally, by diverging from the typical leader prototype. Additionally, it may be the case that men turn down risky leadership position while women are more likely to accept them because they are rarely given the chance to show their leadership potential.

The majority of studies on the glass cliff has been written about the corporate sphere. Only Ryan and Haslam, the creators of the term, have tested whether the glass cliff also applies to the political domain (Kulich, Ryan, and Haslam 2014; Ryan, Haslam, and Kulich 2010). Using data on the 2005 UK general election, they find that female candidates of the Conservative party are more likely to be selected for hard-to-win seats (Ryan, Haslam, and Kulich 2010). They further substantiate this finding with an experiment of a by-election in which they manipulate the winnability (high or low) of a district. The lack of research on the political glass cliff is surprising given that in the political sphere, the gender balance is not significantly better than in the corporate world with women only making up 23.4% of all national parliamentarians (IPU 2018). Additionally, merely eleven women served as Head of State and twelve served as Head of Government as of 2017(IPU 2018). Recent appointments of female party leaders suggest that women also find themselves perched on a glass cliff in politics. The German Social Democratic Party (SPD), for instance, elected their first female party leader, Andrea Nahles, after the party had reached its lowest vote share in the parliamentary elections since 1949 (Wahlrecht 2018).

This thesis attempts to contribute to the research on the political glass cliff by examin-

ing whether women are more likely to be appointed to leadership positions when a political party is performing poorly. If there is a glass cliff phenomenon in politics, I am further interested in the conditions which make women's appointment more or less likely. Analysing the existence of a glass cliff in politics is relevant for several reasons. If female leaders face an increased risk of failure due to the nature of their leadership positions, this may negatively feed into existing stereotypes about the suitability of women in senior positions. This is undoubtedly problematic because it prevents half of the population from achieving their full potential and may lead to the underrepresentation of women's interests (Xydias 2012). If one is aware of the mechanisms that lead to women's underrepresentation, it will be easier to design targeted policies. For instance, if women are more likely to hold precarious leadership positions, merely implementing a quota will not be sufficient.

In their analysis of the political glass cliff, Ryan, Haslam, and Kulich (2010) use constituency candidates as a proxy for CEOs/directors. I suggest that party leaders are a better unit of analysis because, similar to CEOs and directors, they are the most senior leaders and main representatives of the political party. Outside of the glass cliff literature, political science studies have already observed that women tend to be appointed to less competitive seats or placed in inferior positions on party lists (Thomas and Bodet 2013). I am consequently interested in whether the phenomenon even applies to one of the highest levels of political leadership. In addition to that, I am testing whether the gender of previous leaders matters for the choice of the current leader which I refer to as the "gender history condition." The idea is that women may mostly be preferred in precarious situations because men have usually been in power before and are likely associated with the crisis. As a second factor, I am analysing whether it is relevant who is appointing a new leader. In the past two decades, party leadership elections have moved towards greater inclusiveness by allowing party members or delegates to select their leader. Appointments in the corporate sphere are much more exclusive and are usually decided by a small group

of people, such as the board of directors. The difference in selection mechanisms in the political and corporate sphere has not been considered by Ryan, Haslam, and Kulich (2010), but may have an influence on whether women are perched on a glass cliff.

To test the existence of the glass cliff, I use a new dataset on the Comparative Study of Party Leaders (COSPAL) between 1969 and 2012 (Pilet and Cross 2015). COSPAL contains data on fourteen, mostly European countries, with the exception of Australia, Canada and Israel. I analyse the relationship between party performance and leader choice with a logistic generalised estimating equation (GEE) model. I also conduct a 2 (party performance: good or poor) x 2 (history of leadership: male or female) x 2 (gender: male or female) + control experiment on the online platform Amazon MechanicalTurk (MTurk). The first condition is based on the performance of a local political party in a mayoral election. Within the performance conditions, I create additional conditions based on the gender of the person who is associated with the good or poor performance (female or male mayoral candidate and female or male local party leader who is retiring). Respondents are then asked to choose a female or male party leader as well as to evaluate their leadership credentials. While the experiment provides greater internal validity, the observational study adds external validity to my thesis.

Drawing upon the literature, I hypothesise that leadership qualities of male candidates are generally evaluated more favourably (H1) except when a party's performance is declining, in which case women are evaluated slightly more favourably (H2). This also extends to the choice of party leader, thus I hypothesise that female leaders are more likely to be chosen when a party is performing poorly (H3). In terms of gender divisions between appointees, I hypothesise that men are more likely to choose male party leaders when a party is performing well and female party leaders when a party is performing poorly (H4). Women are more likely to prefer female political candidates in times of both good and poor performance, but more in times of crisis (H5). I hypothesise the glass cliff effect to

vanish when the history of leadership in the crisis-ridden political party has been female (H6). Last, I hypothesise that exclusive selectorates are more likely to appoint a female party leader during a period of bad performance than more inclusive selectorates (H7).

The archival and experimental results of my thesis do not provide any evidence for the existence of a glass cliff in politics. The archival study shows that the percentage of female politicians positively influences the likelihood of choosing a female party leader. However, this does not provide any indication with regards to women in precarious leadership positions. The experimental data indicates that women are generally more likely than men to choose female party leaders, particularly in the control condition which partially confirms hypothesis 5. Interestingly, the descriptive statistics for the candidate evaluations show that female party leaders are evaluated much more positively in the bad performance condition than men with regards to their suitability and care. However, this may merely be circumstantial evidence and does not provide enough support for the glass cliff hypothesis.

This thesis is divided into six chapters. The second chapter serves to review different streams of the literature which are relevant for an evaluation of women in precarious leadership positions. I first consult the psychological literature on gender stereotyping to examine which attributes men and women are typically associated with and which biases they face. I then look more specifically at how male and female leaders are evaluated, how structural factors determine who reaches a leadership position and whether male and female leaders actually differ from each other. This is followed by a review of the literature on the glass cliff and its social and structural drivers. The third chapter outlines the archival and experimental data, the research design as well as the methods that are employed. The fourth chapter contains the archival study of the appointment of national political leaders across fourteen countries. I then test the existence of a glass cliff in politics with an experimental study in my fifth chapter. The last chapter notes the limitations of the analyses, suggests avenues for further research and provides some concluding remarks.

# 2 Theoretical Framework: Women in Leadership Positions

Women's representation in leadership positions has attracted much scholarly and public interest over the past decades. While there seems to be a consensus that women's representation in higher ranks needs further improvement, the topic itself has been approached from a variety of angles and has produced various findings. The scholarly debate relevant to this thesis can be broadly divided into (i) psychological research on gender stereotyping and leader prototypes and (ii) organisational and political research on gender and leadership, specifically with regards to the circumstances under which women achieve leadership positions.

Insights from psychology help to understand how cognitive processes shape which particular characteristics are attributed to men and women based on their gender membership. These stereotypes can have an effect on which candidate is chosen for a leadership position and how the performance of that leader is evaluated. Organisational and political science studies advance our understanding of the structural factors that impact women's representation in leadership positions. Since this thesis is interested in examining if and why women are more likely to be appointed to precarious leadership positions, it is important to explain both the social and structural factors that might give rise to the glass cliff. In the following sections, I review the theoretical and empirical findings of the academic debate on gender and leadership more broadly and the glass cliff specifically.

### 2.1 Gender Stereotyping

Humans use stereotypes as cognitive shortcuts to make sense of the physical world (Amodio 2014; Oakes, Haslam, and Turner 1994; Park 1992). Stereotypes are generally conceptualised as overgeneralised attributes that are assigned to people on the basis of their group memberships (Amodio 2014; Hinton 2017). They can be either descriptive (what a group is like) or prescriptive (what a group should be like) (Burgess and Borgida 1999). Humans attribute either personal traits (for example, incompetent or caring) or circumstantial characteristics (such as poor) to others (Amodio 2014). Suppose we believe that women are "bad at maths" or that the current young generation is "narcissistic." We then assume individuals to be mathematically incompetent or narcissistic because we identify them as members of a group. While stereotyping was originally used as a mechanism of survival, its function in today's world is more complex and often perceived to have harmful effects (Amodio 2014; Park 1992). Some scholars argue that it is possible to be non-prejudiced (Devine 2001; Schneider n.d.), however, a lot of recent work supports the idea that stereotypical associations can implicitly influence perceptions of others despite individuals attempting to consciously avoid them (Lai et al. 2016).

### 2.1.1 Implicit and Explicit Gender Stereotypes

Gender stereotyping, conscious or sub-conscious, occurs frequently in our lives. When we do not have any specific information about a person, we make inferences based on their group memberships which can either occur explicitly or implicitly. Explicit stereotypes refer to "shared social knowledge in a given cultural context" (Smeding et al. 2016). This shared knowledge can have a more subtle impact by leading to implicit stereotypes. The idea is that stereotypes are integrated into a social knowledge structure in which concepts are related to each other on the basis of associations (Greenwald et al. 2002). According to

Kahneman (2011), human thought processes can be divided into two systems which serves as a useful distinction to illustrate explicit and implicit stereotypes. System 1 refers to automatic thinking (rapid, effortless and associative) while system 2 pertains to reflective thinking (deductive, slow and self-aware) which requires attentional resources. Implicit stereotypes, such as women are bad at maths, likely result from system 1 thinking. These associations may be stored in our semantic memory, are automatically activated and thus difficult to unlearn (Hinton 2017).

Stereotype research has observed that most people are evaluated on the basis of two dimensions: warmth (also known as communion) and competence (also described as agency) (Cuddy, Fiske, and Glick 2008). The warmth dimension comprises traits such as caring, kind, concerned and moral. In contrast, the competence dimension captures characteristics such as intelligent, decisive, creative and independent. According to Fiske et al. (2002), competence is related to perceived status (i.e. someone appears accomplished or capable), whereas warmth is associated with perceived competition (e.g. a warm person does not pose a threat). Elderly people are, for instance, associated with high warmth and low competence. Research on descriptive stereotypes has found that men are associated with agentic (competent) attributes while women are traditionally associated with communal (warm) traits (Eagly and Karau 2002). Interestingly, while many people have updated their descriptive stereotypes as a response to the increase in women's agentic roles (leadership positions), prescriptive stereotypes about what women should be like have not changed to the same extent (Diekman and Eagly 2000). Women are still evaluated less favourably when they act in a non-stereotypical manner.

The competence and warmth dimension also becomes relevant when people assess whether someone is a good manager/leader. A manager prototype refers to a summary of typical traits and skills that individuals associate with the category of manager (Chung-Herrera and Lankau 2005). Humans attribute characteristics such as intelligence, aggres-

siveness, self-confidence, energy and decisiveness to managers (Chung-Herrera and Lankau 2005). As a point of reference, humans often base their evaluations of managers on the extent to which they fit those stereotypes (Chung-Herrera and Lankau 2005). Men are generally described as being more similar to managers than women due to their agentic traits (Chung-Herrera and Lankau 2005). Female leaders are often expected to be warm and thus, have to reduce their agentic traits (Diekman and Eagly 2000). Women therefore have to present themselves as more agentic to reach a leadership position, but at the same time temper their agency to be in line with prescriptive stereotypes. Based on the literature on gender-based implicit stereotypes, I derive the following hypothesis for the evaluation of leadership qualities:

**Hypothesis 1** Humans are more likely to evaluate leadership qualities of male candidates more favourably.

I expect leadership evaluations (not appointments) of male leaders to remain more favourable when an organisation is performing steadily or well due to system 1 thinking. If individuals cannot meaningfully compare leadership abilities on the basis of the information they are given, they will likely rely on pre-existing schemas in their evaluations. I expect a crisis situation to be an exception because it increases the salience of leadership which may lead to individuals being more reflective.

### 2.1.2 In-Group and Out-Group Biases

Evaluations of men and women are not only shaped by stereotypes but also by group membership. Humans tend to have a stronger preference for members of their own group which is often referred to as an in-group bias (Rudman and Goodwin 2004). It has generally been found that groups which have a higher social standing are more likely to be affected by an in-group bias on an implicit level (Rudman and Goodwin 2004). This can, for instance,

lead to the majority group reinforcing its own position by preferentially selecting members of their own group. Moreover, minorities are more likely to devalue their own group to justify the status quo (Jost and Banaji 1994). Since men still make up the dominant group in the business and political sector, both of these processes may have an effect on the likelihood of women being selected for certain positions. A male in-group bias can explain why men may prefer to give more attractive positions to their in-group members (men) and less desirable positions to out-group members (women). Simultaneously, since fewer women reach leadership positions, women may be more likely to prefer female candidates for both high- and low-risk leadership positions because either option is seen as an opportunity (Hunt-Earle 2012).

#### 2.1.3 Differences Between Male and Female Leaders

Some researchers have also looked into whether female and male leaders actually differ from each other, which can be a potential explanation for a difference in leadership preference. They have, for instance, examined whether men or women differ in terms of their risk nature as an indication of different leadership styles relevant to the glass cliff (Adams and Funk 2012). If women are more risk-loving, they may be more willing to accept a precarious leadership position. However, the evidence on whether women are more risk-taking than men remains mixed and does not lend particularly strong support to the idea that women hold precarious positions due to their risk-loving nature (Elsaid and Ursel 2011). Within political science, most research on gender differences among politicians has focused on women's substantive representation, the idea that female legislators are more likely to represent women's demands and concerns during the policy-making process (Chaney 2014; Wängnerud 2009). While male and female leaders seem to differ to some extent on the priority they assign to diversity policies, there is a lack of evidence that would warrant a preference for female candidates on the basis of their leadership style.

### 2.2 The Relationship between Gender and Leadership

### 2.2.1 The Glass Ceiling

After an overview of the stereotype research relevant to the glass cliff, I subsequently examine organisational research about the factors that may hold women back from applying to or being accepted for leadership positions. One of the concepts that has been extensively researched within gender and leadership research in the past decades is the "glass ceiling." Barreto, Ryan, and Schmitt (2009) coined the metaphor to describe how women aspiring a leadership position find themselves blocked by invisible (glass) yet real barriers (ceiling). This results in a trend where women disappear the higher one climbs up the corporate ladder. While the evidence remains mixed, a glass ceiling for women has been observed in both the economic and the political sphere. The lack of women running corporations and acquiring high political positions is taken as evidence for discriminatory barriers (Maume 2004). This has been particularly true in recent years since critics cannot argue anymore that it simply takes time for women to achieve the same educational level considering women's higher graduation rates in many countries (Maume 2004).

The literature on the glass ceiling has suggested a number of factors which could explain the invisible barriers. The human capital argument states that women invest less in education, training and work experience which results in a scarcity of qualified women for leadership positions; a so-called "pipeline problem" (Northouse 2007). However, the pipeline only starts leaking further down in women's careers which suggests that the lack of human capital is mainly due to different care-taking responsibilities (Northouse 2007). While the gender gap in unpaid work has been decreasing, women continue to be responsible for the majority of care-taking responsibilities (Hewlett, Luce, and West 2005). Due to a lack of flexible work arrangements, women struggle to combine family responsibilities and

a career which commonly results in "off-ramping" (Johns 2013). This means that women often pay a high price for their career break in terms of promotion opportunities. Another factor which may prevent women from applying is the "psychological glass ceiling." Since leadership and competence are implicitly associated with masculine characteristics, women may think they are not qualified for a particular position (Frankforter 1996; Heilman 2001; Smith, Caputi, and Crittenden 2012). Once they are in the application stage, they may be disadvantaged by the similarity-attraction effect which causes people to preferentially recruit or promote employees who are similar to them (Ostroff and Judge 2012). Given that the higher ranks of the business and political sphere are still primarily dominated by men, this leads to a vicious cycle in which men continue to appoint or employ other men. This process may be reinforced by in-group biases which result in men viewing other men more favourably. Even if women are building a career within an organisation, they still tend to be excluded from informal networks which are important resources for promotions (Braddock II and McPartland 1987; Johns 2013).

While much of the research on the glass ceiling has been conducted for the business sector, several studies have shown that these factors also influence women's advancement in politics (Folke and Rickne 2016; Jalalzai 2008; Kropf and Boiney 2008; Palmer and Simon 2001; Palmer and Simon 2010). However, there are certain institutional features that are inherent to the political system and further shape the existence of a glass ceiling. Jalalzai (2008) has, for instance, found that women are more likely to become leaders in fragmented executive power arrangements which can either be a combination of parliamentary and presidential structures or a pure parliamentary system. Prime ministers tend to be less independent than presidents and typically share power with a party, hence Jalalzai (2008) argues that it is viewed as a more acceptable position for women. It is also more difficult for women to climb up the political ladder in systems with single-member districts due to the incumbency effect. Since the majority of political office-holders are male, they benefit from

name recognition and greater access to funding sources (Kropf and Boiney 2008; Palmer and Simon 2001). The fact that women are more likely to run for open seats shows that the incumbency effect may deter women from putting themselves forward as candidates in the first place (Palmer and Simon 2001).

### 2.2.2 The Organisational Glass Cliff

Recently, organisational research on gender equality has expanded explanations of women's underrepresentation by not only examining why women struggle to reach managerial positions (glass ceiling) but also in which context women are offered leadership positions. A 2003 Times Article by Judge (2003) raised interest in gender-specific leadership effects. Judge (2003) was specifically interested in whether women who have broken through the glass ceiling and reached senior leadership positions had been a help or hindrance to company performance. In a correlational analysis of FTSE 100 shares, she finds that 60% of the ten companies with the highest number of female board members have underperformed the FTSE 100 while the companies with the greatest lack of female representation have, on average, outperformed the index (Judge 2003). She consequently concludes that women have "wreaked havoc" on companies' performance (which was later altered in the online version)(Judge 2003). However, she neither published her statistical analysis and its limitations nor discussed the operationalisation of variables.

Ryan and Haslam (2005) thought there was more to the story than women being bad leaders, so they decided to use the same FTSE 100 data to explore the relationship between board appointments and company performance more carefully. Their sample is made up of 37 British companies that appointed 19 women (one company appointed two women) and 19 men to the board in 2003. In addition to Judge's measure of company performance - the percentage movement on the London Stock Exchange Share Monitoring Service in 2003 - they also use the change in monthly share price (raw return) six months before

and after the board appointment. They hypothesise that the relationship could be reverse and that the poor performance of a company may, in fact, incentivise the appointment of female board members. This expectation is formed due to evidence that a decline in stock performance is more likely to trigger a change in the board of directors (Kaplan 1995).

Contrary to Judge, the results reveal that the appointment of a woman to a board does not lead to a subsequent decline in a company's performance (Ryan and Haslam 2005). Since Judge did not consider the time of the appointment, she likely oversaw this trend in the data. Ryan and Haslam even find that the appointment of women leads to an increase in share prices in periods of financial downturn and to price stability in better times. More importantly, they find that companies are more likely to appoint a female board member when they have performed poorly in the months prior to the appointment. This effect is more pronounced when the market is experiencing a general financial downturn. Ryan and Haslam (2005) call this finding a glass cliff because women are appointed to senior positions in precarious situations which means they may be set up to fail and thus, be perched on a glass cliff.

The 2005 article by Ryan and Haslam has triggered a number of theoretical and empirical studies on the glass cliff. While the literature still remains relatively sparse and dominated by the original creators of the concept, several studies have been able to replicate the glass cliff effect in organisations using archival data (Brady et al. 2011; Brown, Diekman, and Schneider 2011; Cook and Glass 2013; Haslam et al. 2010; Mulcahy and Linehan 2014; Ryan and Haslam 2005). The initial archival study by Ryan and Haslam (2005) examines a small sample of board appointments in the UK in a 1-year-period because it acted as a direct response to the Times Article. Since then, Haslam et al. (2010) have substantiated their findings by investigating female board appointments of FTSE 100 companies between 2001 and 2005. As an addition to their first study, they include time lagged correlations between women's presence on company boards and a stock-based mea-

sure of performance which allows them to directly compare the effect of weak and strong performance on the gender preference.

The glass cliff effect in England is further replicated in a difference-in-difference approach by Mulcahy and Linehan (2014) who observe that the performance of a company has an impact on the gender diversity of the board. When a firm is in a more precarious situation, women join the board and men leave. Subsequent archival studies further reveal that women are more likely to be appointed as CEOs in struggling US firms (Cook and Glass 2013) or US firms that experience a scandal (Brady et al. 2011). Additionally, white men are more likely to replace a minority CEO ((black) women or black men) when a firm is experiencing a poor performance which Cook and Glass Cook and Glass (2013) term the "savior effect." Cook and Glass (2014) try to replicate their findings a year later in a second study which also uses the Fortune 500 companies as a sample but over a 20-year period. This time, they do not find evidence that female leaders will be appointed as CEO when firms experience declining growth. Additionally, they are not more likely to be replaced by a male leader when a company's performance does not improve during their leadership. Consequently, their results on the glass cliff and saviour effect remain mixed.

Interestingly, the only other archival study on the glass cliff for CEOs in US corporations between 1992 and 2004 by Adams, Gupta, and Leeth (2009) is also unable to replicate the glass cliff effect. The authors use stock returns as a measure of financial performance six months prior to an appointment. Contrary to their expectations, they find that stock price performance preceding a CEO appointment is more likely to favour women and does not make a difference for men. This finding is robust to the state of the general market. They thus conclude that there are no differences in opportunities for men and women above the glass ceiling. Ryan and Haslam (2009) urge caution in considering their findings, because only 4% of the 1500 companies in the sample had female CEOs which makes it difficult to draw general conclusions. It may simply be the case that the 61 female CEOs had

financial resources and networks which differentiated them from other women. A study by Hennessey, MacDonald, and Carroll (2014) also does not observe the glass cliff phenomenon in the Canadian case. They test the phenomenon by using matched data (woman and man) of board appointments in 2006 and 2008, 38 and 24 total appointments respectively. Their results suggest that women are, in fact, more likely to be appointed to a board when a company has experienced a superior performance than those that appoint men. In line with Judge, they also find that in the 12-months period following the appointment, companies appointing females tend to underperform compared to those appointing males. While these studies only provide correlations, they still suggest that a glass cliff may be limited to particular cases.

The mixed evidence of archival studies shows the need for experimental research on the glass cliff. Most of the experimental studies on the glass cliff use a research design inspired by Haslam and Ryan (2008). Their general design can be summarised in the following way. Respondents usually receive a description of an organisation which is either performing well or badly. They are given biographies and sometimes photographs of three candidates for the leadership position, an equally qualified male and female and a less qualified male to represent the gender distribution among applicants. Participants are then asked to indicate their opinion of the candidates' leadership ability, suitability for the position and to rank the three candidates from one to three.

Haslam and Ryan (2008) run three versions of the previously mentioned experiment on (i) British management postgraduate students, (ii) community college students and (iii) business people. In their first study, they were interested in assessing whether the type of company (manufacturers of building materials or organic health and beauty company) matters for the leadership preference. They find that the female candidate is generally preferred but receives most support when the company's performance is declining. The type of company does not have any effect on the choice of candidate. Interestingly, while

the female candidate is preferred in the crisis situation, it does not have any effect on the ratings of the candidate. Only the male candidate is evaluated as having less leadership abilities when a company's performance is declining. The second study, which involves the appointment of a youth consultant of a music festival, shows a clear preference for a male candidate in the improving condition and a clear preference for the female candidate in the declining condition The first two experiments have within-participants designs (all candidates are presented to all respondents) which makes it easier to investigate the ranking of candidates but not their evaluation scores. Consequently, Haslam and Ryan (2008) decide to also run a between-participants design in which the candidate gender is manipulated between experimental groups (one receives the male and the other one the female candidate). Once again, the female candidate is viewed as being more suitable and having greater leadership ability than an equally qualified male candidate in the bad performance condition. Following Haslam and Ryan (2008), a number of studies have replicated these findings using a similar methodology (Bruckmüller and Branscombe 2009; Gartzia et al. 2012; Hunt-Earle 2012; Rink, Ryan, and Stoker 2013) which results in the following hypothesis:

**Hypothesis 2** Female candidates will be evaluated slightly more favourably when a party is performing poorly.

It is important to mention that the evaluation occurs before the appointment of the party leader. This thesis does not investigate how evaluations of male and female leaders differ after their appointment.

**Hypothesis 3** Female leaders are more likely to be chosen when a party's performance is in decline.

Some researchers have also examined the glass cliff in specific sectors of the economy (Ashby, Ryan, and Haslam 2007; Wilson-Kovacs, Ryan, and Haslam 2006). Ashby, Ryan,

and Haslam (2007) experimentally test whether female lawyers are more likely to be assigned to high risk cases. 114 UK undergraduate law students are given descriptions of two legal cases, a high risk case or a low risk case. Similar to Haslam and Ryan (2008), they provide biographical details of three lawyers (two equally qualified male and female candidates and a less qualified male candidate). They include photographs of the lawyers which can be considered problematic given that pictures may introduce biases beyond the treatment effect. Interestingly, in the low risk case, no gender is preferred while in the high risk case the female candidate is viewed more positively. This could be related to the fact that the sample was predominantly female (two thirds). While the high risk case is not seen as desirable, the authors suggest that it may have been perceived to provide a career opportunity for women.

Some experimental studies have considered external factors that may have an influence on the glass cliff effect. Hunt-Earle (2012), for example, uses the within-participants design of Ryan and Haslam to further test if the gender of the recruiter (appointer) has an effect on which candidate is preferred. She finds that male recruiters prefer neither gender in the failing company condition and are 70% more likely to choose a men for a successful company. Female recruiters differ in their choice by preferring women in either condition, 60% for the successful company and 70% for the failing company. As previously mentioned in the gender stereotyping section, she suggests that this may be due to in-group biases. Men may prefer to give more attractive positions to their in-group members (men) and less desirable positions to out-group members (women). Simultaneously, since fewer women reach leadership positions, women may be more likely to prefer female candidates for both high- and low-risk leadership positions because either option is seen as an opportunity. It thus derive the following hypotheses about the preference of male and female appointers:

**Hypothesis 4** Men are more likely to choose male party leaders when a party is performing well and female party leaders when a party is performing poorly.

**Hypothesis 5** Women are more likely to prefer female party leaders in times of both good and poor performance, but more in times of crisis.

Two other studies have examined external factors that may influence the glass cliff (Bruckmüller and Branscombe 2009; Rink, Ryan, and Stoker 2013). Rink, Ryan, and Stoker (2013) focus on whether the social resources (social support from colleagues and stakeholders) available to a new leader matter for the choice of leader. They observe that women are only preferred in a badly performing company when they cannot rely on social resources. Rink, Ryan, and Stoker (2013) argue that selectors recognise when a position comes with a great personal cost due to a lack of social resources, thus women are placed on a glass cliff. They also assume that women are preferred in the case of social support due to the stereotype that women possess communal attributes which will enable them to gain greater social resources once they are in office. Unfortunately, the data set of party leaders lacks information on the percentage with which a candidate was endorsed which would have been an appropriate proxy for the candidate support of shareholders and the board of commissioners used by Rink, Ryan, and Stoker (2013). I am also unable to include the social resource factor in my experiment given that it already includes nine experimental conditions and further conditions would reduce the statistical power. Thanks to the experimental study, I can, however, test the mediation factor proposed by Bruckmüller and Branscombe (2009), who look into whether the gender of the previous leadership mediates the glass cliff phenomenon. They find that when the leadership of a badly performing company is male, the glass cliff emerges, but is significantly reduced when that leadership is exclusively female. They suggest that the glass cliff may at least be as much, if not more, about men and leadership than about women and leadership.

It may be the case that male leaders are perceived to be lacking the leadership attributes when a company is performing badly under male leadership. Consequently, I hypothesise the following relationship between gender history and candidate preference:

Hypothesis 6 The glass cliff effect will vanish when the history of leadership in the crisis-ridden political party has been female.

This hypothesis can mostly be tested with the experiment. In the case of observational data, it is less clear whether selectors actually associate a crisis with the previous national party leader. Political parties are less straight-forward than companies in terms of who is responsible for a particular performance.

#### 2.2.3 The Political Glass Cliff

While there is extensive evidence that the glass cliff effect can be observed in the corporate sphere, only two studies, again co-authored by Ryan and Haslam, apply the concept to politics. Together with Kulich, they test the glass cliff with observational and experimental evidence in the case of the United Kingdom, which forms the foundation of this thesis (Ryan, Haslam, and Kulich 2010). They find that men are more likely to be selected as candidates for safe seats in the 2005 UK general election, but that there is a strong preference for a female candidate when a seat is hard to win. This phenomenon only applies to the Conservative party since the Labour party has implemented an affirmative action policy to ensure that women get access to winnable seats. They further test this effect by conducting an experiment with a student sample. Participants are given information about a by-election to replace a retired Member of Parliament (MP) and three competing candidates (two equally qualified male and female candidates and a less qualified male candidate). The conditions are manipulated based on either the high winnability or low winnability of the party. Respondents then have to answer questions about the suitability and the leadership ability of the candidate as well as rank them according to their

preference. While they do not find any effect of the suitability or leadership ability of a candidate on the likelihood of being preferred, they are able to show that a female candidate is more likely to be chosen for a hard-to-win seat and a male candidate for a winnable seat. However, it is unclear whether they have randomised the gender of the two more qualified candidates which may indicate that the biography has played a role.

The same authors also analyse whether there is a glass cliff effect for minority candidates (Kulich, Ryan, and Haslam 2014). They employ observational data on constituency candidates in UK general elections in 2001, 2005 and 2010. They find that Conservative black and minority ethnic (BME) candidates are less likely to win a seat, however, this effect is mediated by the lower winnability of BME candidates' seats. They are also able to replicate the gender-based glass cliff in this study. Overall, while there is mixed evidence for the glass cliff, most studies seem to point at the existence of such a phenomenon.

A potential reason why there have only been two studies on the political glass cliff may be that a crisis/period of poor performance is more difficult to classify in a political context. Ryan, Haslam, and Kulich (2010) use the winnability of seats, operationalised as the margin of votes won or lost in the previous elections, as a proxy for good or bad performance. They simply compare the margins of female and male candidates in their first study (Ryan, Haslam, and Kulich 2010) and those of white and BME candidates in their second study (Kulich, Ryan, and Haslam 2014). In the context of political party leaders, this measure becomes a bit more difficult. Due to a lack of data, I am using the change in vote share between the previous and current election as a proxy for party performance.

#### 2.2.4 Drivers of the Glass Cliff

Overall, while there is mixed evidence for the glass cliff, the majority of studies point at the existence of such a phenomenon. Additionally, there is a lot of overlap in the causes different studies refer to as an explanation of the glass cliff effect. Organisational research has mostly focused on social explanations of the gender preference for precarious leadership solutions. To further understand how characteristics inherent to the political sphere may give rise to or moderate the glass cliff, I also present structural factors identified by political research on gender and leadership.

#### **Social Factors**

A prominent explanation for the glass cliff effect is the think crisis-think female mindset which refers to the idea that people may prefer feminine characteristics in precarious situations. This particular notion is based on implicit gender stereotypes which hold that men are associated with agentic attributes and women with communal traits (Eagly and Karau 2002). While agentic attributes are commonly preferred for successful leadership, a badly performing organisation is perceived to require feminine rather than masculine traits for its success. In a qualitative study, Ryan, Haslam, and Postmes (2007) uncover that individuals prefer communication skills and the ability to motivate others in a crisis situation which are skills traditionally associated with women. Ryan et al. (2011) follow up on their previous study by examining the relationship between stereotypes and company performance in greater detail. In a pilot study, they first identify typically masculine and feminine traits which they later compare to the traits preferred for managers of successful and unsuccessful companies. In a first study, they find that there is a stronger relationship between masculine stereotypes and traits of managers of successful managers than between the latter and feminine attributes. In a second, more sophisticated study, they ask participants to characterise their ideal manager instead of providing a list of characteristics that they are expected to match. Interestingly, respondents choose a fairly equal amount of masculine and feminine traits, but in the crisis situation, they prefer more feminine traits. This hints at the fact that there may be a difference in descriptive traits (what managers are like) and prescriptive traits (what we want managers to be like).

Preliminary evidence by Bruckmüller and Branscombe (2009) further substantiates these results by finding that stereotypically male attributes (independent, competitive, dynamic, striving for power, decisive, objective) are most predictive of leadership selection when an organisation is successful, but less preferred in times of crisis. Additionally, the difference in desirability between male and female attributes shrinks massively in the crisis situation with female attributes (communication skills, willing to cooperate, able to work in teams and able to encourage others) becoming slightly preferred. As predicted by the think crisis-think female theory, Rink, Ryan, and Stoker (2013) also find that women were associated with communal attributes which were thought to be more effective in a crisis situation. There is some evidence that suggests that the phenomenon should potentially be called "think crisis-think minority" rather than "think crisis-think female." Cook and Glass (2013) demonstrate that ethnic minorities are more likely to be selected to CEO positions when a company is facing a declining as opposed to improving performance. The same effect has been replicated in politics by Kulich, Ryan, and Haslam (2014) who show that ethnic minority candidates are more likely to be selected for hard-to-win seats than white candidates. This could either mean that the glass cliff effect is not a result of feminine traits or that there are different mechanisms underlying the preference for women and minority candidates for precarious leadership positions.

Some studies also suggest that the glass cliff is not driven by a think crisis-think female mindset, but rather a think crisis-think not male view. In their study of the legal glass cliff, Cook and Glass (2013) find that a high risk legal case is perceived as a much better opportunity for the woman than for the man. Since men are in a more privileged position, respondents may assume that they have more to lose and that the position is not attractive for them. This may suggest that women are not appointed to leadership positions because of their capabilities, but because decision-makers want to protect men from failure. Part of the reason may be in-group favouritism which leads to male decision-makers giving pref-

erential treatment to their fellow group members. Research by Rink, Ryan, and Stoker (2013) lends further evidence to this assumption by showing that women are only preferred in crisis situations when the new leader does not have available social resources (management support) which makes the position much riskier and less attractive. Additionally, Ryan et al. (2011) observe that women are only preferred in particular crisis situations which involve taking on a more passive role or being a scapegoat. However, it needs to be stated that it may simply be the case that men are also offered risky positions but due to greater availability of other (more desirable options) and potentially greater knowledge of the state of the company (social networks), they may simply refuse to accept the position.

Studies have also suggested that badly performing organisations may want to signal change internally and externally by appointing a non-typical leader. Preliminary evidence for this explanation has been found by Bruckmüller and Branscombe (2009) who show that when the leadership of a badly performing organisation has been female, the glass cliff effect is attenuated. The previously mentioned studies on minorities and the glass cliff further support this narrative (Cook and Glass 2013; Kulich, Ryan, and Haslam 2014). If the glass cliff is a result of signalling, then any leader deviating from the prototype should be preferred, regardless of whether they are a gender or ethnic minority.

#### **Structural Factors**

There are structural factors which have been found to be conducive or unfavourable to the appointment of female leaders. Several studies have observed that the higher the proportion of women in a company and the higher the number of female senior managers, the greater the chances for women to advance their leadership goals (Cohen, Broschak, and Haveman 1998). This may be due to the similarity-attraction theory or because a greater percentage of women indicates that there is a bigger supply of female candidates (Matsa and Miller 2011). Glass and Cook (2017) also suggest that having more gender

diverse boards can decrease the salience of gender stereotypes, signal to women that the firm is committed to equality and form mentorships among women. Moreover, women are more likely to hold leadership positions in companies which have a higher turnover and lower average management salaries. This suggests that women have a higher likelihood of becoming managers in organisations and sectors that are less desirable (Goodman, Fields, and Blum 2003).

Some of the previously mentioned factors also apply to women's advancement in the political sphere. Gender and politics research has identified many formal and informal institutional factors that influence women's political representation such as electoral systems, gender quotas and gender norms. While the level of democracy has generally been found to have little or no effect on women in legislatures, the egalitarian orientation of a country seems to be important to female representation (Paxton and Kunovich 2003). In terms of the electoral system, multiple studies have shown that women's representation is higher under proportional representation (PR) systems than under a plurality system which may also affect their likelihood of reaching high rank positions (Moser 2001; Rule and Zimmerman 1994) With greater district magnitude, women have higher chances of being put forward as a candidate. The proportionality of the system incentivises parties to diversity their candidate selection since they need to appeal to different constituencies. However, it also needs to be mentioned, that even if women are increasingly selected as candidates, research suggests that they are more likely to be appointed as candidates in hard-to-win districts and to be placed in inferior positions on a party list (Cross and Pilet 2015; Thomas and Bodet 2013).

Similar to companies, if there is a higher percentage of female politicians, it is more likely that a woman will receive a leadership position, for instance in committees (Kittilson 2006), cabinets (Escobar-Lemmon and Taylor-Robinson 2005; Krook and O'Brien 2012) or as head of government and state (Jalalzai 2013). Having many female politicians indicates

that it is normal for women to play a role in politics (Cross and Pilet 2015). Additionally, there is a greater supply of female candidates for high-rank positions. As a possible driver, research suggests that the adoption of legally imposed or voluntary electoral gender quotas tends to lead to a higher percentage of female politicians (Lombardo, Scoppa, and Paola 2010; Meyer 2003) and female leaders (O'Brien and Rickne 2016; Pande and Ford 2012). Quotas may (i) increase the pool of candidates for leadership positions and (ii) signal a commitment to gender equality which may incentivise women to apply to those positions. Of course, electoral gender quotas and the number of female politicians are usually not explanatory factors in themselves but related to other aspects within a country. When considering the political sphere, it is also important to take into account the ideology of a party. Political parties that are more left-leaning tend to place a higher priority on gender equality and have a higher percentage of female politicians (Caul 2001; Reynolds 1999). However, non-leftist parties are also increasingly nominating women, potentially due to party competition, which indicates that this effect may not be as pronounced anymore (Matland and Studlar 1996). Cross and Pilet (2015) further add to this that parties that have a high percentage of female party members and have had a female leader before, tend to be more likely to appoint a female leader again.

With regards to the glass cliff, it is further important to consider how the leadership selection mechanisms within parties affect women's likelihood of being appointed. Kenig (2009) has developed a scale of the degree of inclusiveness of leadership selection methods in parties ranging from one person or a small party group (exclusive) to the whole electorate (inclusive). In recent decades, many parties have moved towards more inclusive mechanisms of leadership selection (Cross and Pilet 2015). The evidence on the effect of selection mechanisms on women's representation remain rather mixed, however. On the one hand, Rahat, Hazan, and Katz (2008) argue that more inclusive forms of selection prevent deliberation and consensus-building since voting happens in an anonymous manner.

Contrary to that, a small group of selectors will factor in certain compromises, such as splitting the leadership positions between a man and a woman. On the other hand, studies have shown that party elites tend to place female candidates in less attractive district, in inferior positions on party lists and provide less media coverage to women (Dahlerup 2007; Thomas and Bodet 2013; Wauters, Weekers, and Maddens 2010). Additionally, since party elites still tend to be dominated by men who are responsive to in-group biases, they are more likely to give preferential treatment to their own group. Since the party base tends to be more diverse than the party elite, in-group biases should somewhat cancel out. A study by Cross and Pilet (2015) on gender and party leadership confirms the idea that wider selectorates are more likely to do so in times of crisis:

**Hypothesis 7** Exclusive selectorates are more likely to appoint a female party leader during a period of bad performance than more inclusive selectorates.

Table 1: Summary of the Hypotheses

Leadership qualities				
H1	Humans are more likely to evaluate leadership qualities of male candidates more			
	favourably.			
H2	Female candidates will be evaluated slightly more favourably when a party's per-			
	formance is in decline.			
Lead	dership appointment			
Н3	Female leaders are more likely to be chosen when a party's performance is in decline.			
H4	Men are more likely to choose male party leaders when a party is performing well			
	and female party leaders when a party is performing poorly.			
Н5	Women are more likely to prefer female party leaders in times of both good and			
	poor performance, but more in times of crisis.			
Gen	Gender history			
Н6	The glass cliff effect will vanish when the history of leadership in the crisis-ridden			
	political party has been female.			
Selec	Selection mechanism			
H7	Exclusive selectorates are more likely to appoint a female party leader during a			
	period of bad party performance than more inclusive selectorates.			

## 3 Data and Methods

In this chapter, I outline the data and methods used to explore all of the hypotheses listed in Table 1. I employ both archival and experimental data which will allow me to gain a better understanding of the mechanisms that underly the political glass cliff.

## 3.1 Assumptions of this Study

When testing the glass cliff phenomenon in the political context, I make several assumptions which need to be discussed prior to an elaboration of my data. First, the idea that women are preferentially selected to precarious leadership positions is not limited to the highest level of leadership. In previous studies, evidence for the glass cliff has been found for female board members (Mulcahy and Linehan 2014; Ryan and Haslam 2005), CEOs/managing directors (Bruckmüller and Branscombe 2009; Hunt-Earle 2012), senior management (Haslam and Ryan 2008), youth consultant positions (Haslam and Ryan 2008), lawyers (Ashby, Ryan, and Haslam 2007) and constituency candidates (Ryan, Haslam, and Kulich 2010). I therefore test the existence of the glass cliff on two different levels, national and local party leadership. It needs to be mentioned, however, that the selection mechanism likely differs between various levels of leadership which may have an effect on the glass cliff. In my experimental study, I thus test the glass cliff in the case of a regular voter whereas I investigate different party leader selection mechanisms with my archival data. Third, I make the assumption that male and female candidates are equally skilled and competent. Since I am only able to control for leadership ability in the experi-

ment, this assumption is mainly relevant for the archival study. I essentially assume that politicians who have made it this far must be qualified for the position of party leader. In reality, there may of course be differences in terms of experience and skills which should be further investigated in case studies.

### 3.2 Data Set of National Party Leaders

To better understand the relationship between party performance and leadership selection while also accounting for a number of moderating factors, I use the unpublished data set on the comparative study of party leaders (COSPAL) by Pilet and Cross (2015). The data set covers the leaders of 108 parties in fourteen countries: Australia, Austria, Belgium, Canada, Denmark, Germany, Hungary, Israel, Italy, Norway, Portugal, Romania, Spain and the United Kingdom. While the data set provides information from 1955 onwards, I focus on the time period between 1969 and 2012. In 1969, the first female party leader was selected which makes it a good starting point for my analysis. To my knowledge, COSPAL is the only data set which provides information on the characteristics of party leaders across countries and party families as well as the leadership selection mechanisms.

I use party leaders as my unit of analysis because I am interested in finding out under which conditions women are elected to the highest political party office. I remove parties with collective leadership from the analysis (such as the German Green party) because they always require a woman and a man to be part of the leadership which makes it irrelevant to look for a glass cliff phenomenon. It needs to be mentioned, however, that they tend to be left-leaning which may affect the results for particular party families. I further remove observations for years in which a party participated in an election for the first time, because those years prevent me from measuring a change in performance. I also ignore observations which show that there was no change in leadership since this analysis does not address why

leaders remain in power. After cleaning the data set, I am consequently left with complete information on 445 party leaders.

#### 3.2.1 Variable Descriptions

Table 2 displays the variables used in this study which have been derived from the literature. The response variable, gender, is a dummy which captures whether a party leader is female or male. The explanatory variable is the party performance which is calculated as the percentage change in vote share between the previous and the last election. I would have liked to use the type of resignation of the previous leader (voluntary or involuntary) as a further proxy for party performance, however, this was not possible due to a lack of data. The idea is that if the predecessor had to leave office, the party is likely facing a crisis which may reflect upon their choice of successor.

I am including several control variables as other explanatory factors which I assume to have an effect on the likelihood of women being selected but not necessarily as drivers of the glass cliff. One of the controls is the *electoral system* since studies have observed that more proportional systems facilitate women's climb to the top. In addition to that, it has been argued that the higher the proportion of *female MPs*, the greater the likelihood of a female party leader due to more supply of female candidates and a greater acceptance of women in politics. I am also including a variable on the *left/right* position of parties because left-leaning parties have been suggested to be more open towards women. Moreover, research on female leadership has observed that more inclusive *selectorates* are more likely to select female leaders. I am unfortunately unable to assess the effect of party families (too few observations per family) and of incumbents (lack of data).

<sup>&</sup>lt;sup>1</sup>The World Bank data on female MPs has been complemented with national data sources for the years prior to 1990.

Table 2: Overview of the Variables

Variable	Conceptualisation	Measurement	Recoding	Source
Response				
Gender	Gender of the party leader	Binary: female (1) or male (2)	Binary: female (1) or male (0)	(Pilet and Cross 2015)
Explanatory		· /	,	,
Party performance	Change in party performance	Continuous: percentage change in vote share since the last election		(Pilet and Cross 2015)
Control				
Electoral system	System used for parliamentary elections	Categorical: proportional (1), plurality/majority (2), mixed (3)		(IDEA 2018)
Female MPs	Proportion of female members of parliament (MPs)	Continuous: percentage scale from 0 - 100		(Bank 2018)
Leader history	Gender of previous leader	Binary: female predecessor (1) or male/no predecessor (0)		(Pilet and Cross 2015)
Left/right	Placement on left- right scale	Categorical: left (1), centre (2) or right (3)		(Pilet and Cross 2015)
Selectorate	Eligible appointees of party leader	Categorical: all voters (1), eligible party members (2), delegates to party convention (3), party council (4), parliamentary caucus (5), self-appointed leader (6), appointed by incumbent (7)	Binary: inclusive (1) (based on 1 to 3) and exclusive (0) (based on 4 to 7)	(Pilet and Cross 2015)

#### 3.2.2 Method

To examine the relationship between party performance and the appointment of female party leaders, I use a logistic regression because I have a binary response variable and both continuous and categorical predictors. However, since I have several leader appointments for each party across time, the assumption of independence of observations is violated. As expected, the residual plot as well as the Durbin Watson test show that my data suffers from autocorrelation. In that case, a conditional logistic regression model could be employed by adding fixed effects for political parties, but since I am also interested in time-invariant effects (such as the left-right position of a party), this is not an optimal solution.

I thus apply a generalised estimating equation (GEE) as my main method which allows for the specification of a correlation structure. The assumptions of the GEE are met since there are no correlations that go beyond clusters and political parties provide a sufficient number of clusters. The choice of a correlation structure is a bit more difficult, however. The ones hat seem most applicable to the data set are the autoregressive (AR-1) and the exchangeable structure. The AR-1 structure assumes time measurements to be equally spaced (to decrease correlation) which is not the case for party leader selections that typically occur at different points in time and with differing frequency. The exchangeable structure assumes measurements to be equally correlated regardless of how far apart they are. I thus run my models with both correlation structures and compare their model fit with the Quasi-likelihood under Independence model Criterion (QIC). As a measure of robustness, I also compare the results to a conditional logit model and a standard logistic model which can be found in Appendix B.

### 3.3 Glass Cliff Experiment

Several empirical studies on the glass cliff have either complemented their observational analysis with an experiment or have relied on survey experiments as their main form of data collection (Ashby, Ryan, and Haslam 2007; Bruckmüller and Branscombe 2009; Gartzia et al. 2012; Haslam and Ryan 2008; Hunt-Earle 2012; Rink, Ryan, and Stoker 2013). In a survey experiment, the researcher changes the ordering or wording of questions and texts to induce a treatment (Gaines, Kuklinski, and Quirk 2007). To establish causality, respondents are randomly assigned to a control or treatment group(s) (Gaines, Kuklinski, and Quirk 2007). The nature of the study occasionally only allows for a comparison between treatment groups. The only experimental study on the political glass cliff falls within that category of studies by only comparing different treatment groups (Ryan, Haslam, and Kulich 2010).

In this thesis, I employ a 2 (party performance: good or poor) x 2 (history of leadership: male or female) x 2 (gender: male or female) + control experimental design. Adding a control group to the survey allows me to meaningfully compare treatment groups to a baseline as well as to each other. I ran a power analysis based on a pilot study conducted during the Experimental Political Science class<sup>2</sup> and prior work on the glass cliff which showed that I need around 630 respondents (90 for each of the seven experimental groups) to reach a statistical power of at least 0.80. This means I can be fairly confident that my analysis returns statistically significant results 80% of the time, if they are there. The survey was hosted on the online platform Amazon MechanicalTurk (MTurk) as a two-minute Human Intelligence Task.

<sup>&</sup>lt;sup>2</sup>The pilot study will not be discussed in this thesis because it was very underpowered (fewer than 15 respondents per experimental condition). A few adjustments were made to the survey after the initial study to make gender less salient.

Experiments in Political Science provide a useful complementary analysis because they allow us to standardise an effect and to reduce the likelihood of external factors (McDermott 2002). If subjects are randomly assigned to conditions and are representative of the population of interest, experiments enable us to make inferences about people's behaviour and attitudes. Since each subject has the same chance of being placed in a particular condition, we avoid systematic biases in our sampling. However, one should also be aware that several biases can harm the validity of the results. Researchers may, for instance, expect a certain outcome and sub-consciously influence the respondent to behave or respond in a particular manner (McDermott 2002). The expectancy effect has been avoided in this study with the use of an online survey experiment which circumvents any contact between the experimenter and the subjects. Researchers may also suffer from an experimenter bias which leads them to (sub-consciously) design an experiment that is likely to confirm their beliefs (McDermott 2002). To avoid this bias from influencing my study design, I have largely based the set-up on existing studies with a few adjustments that have been discussed with researchers who are not involved in this project.

However, there are two issues that may affect my research. For one, I am using a convenience sample since the survey was offered on MTurk which means it was not given to a completely random sample. Participants received a small compensation for completing the survey (0.45 US Dollar for the survey). While respondents on MTurk do not fully represent the demographic structure of the US population, MTurk samples have been shown to be more representative than in-person convenience samples (Berinsky, Huber, and Lenz 2012). I am collecting demographic information from my respondents to further assess how representative the sample is of the US population which will then inform to what extent the results may reflect the behaviour of the population of interest.

#### 3.3.1 Experimental Conditions

The glass cliff survey is hosted on Qualtrics before it is published on MTurk because the software allows for random assignment of respondents to different conditions. Respondents have an equal chance to fall into any of the seven experimental groups. The full survey can be found in Appendix A, hence I only provide a brief description in this section.

As a first question, participants have to choose whether they identify as Republican, Democrat or Independent on a 7-point scale. This information is then used to make the experiment more realistic by conditioning further questions on their response. Respondents who identify as Independents are sent to the end of the survey, because the survey design makes it impossible to randomly assign them to the Democratic and Republican condition.

Respondents then receive one of the descriptive texts, six of which include a treatment. In the control condition, participants are told to imagine that they have just moved to a new city and want to inform themselves about local politics. They find out that a mayoral election is coming up. In the good and bad performance condition, they are further told that the candidate of their party won or lost the previous local election by a large margin and that the party is expected to achieve good or poor results once again. This information has been added to distinguish between a crisis context and a good performance. In the male and female leader history conditions, respondents are further provided with a male or female name for the candidate who won or lost the previous local election.

In each condition, participants are then told that the leader of their party has recently decided to retire. Four candidates are now competing for the vacant position, but they are only introduced to two of them. Following Bruckmüller and Branscombe (2009), I mention four candidates to draw away the attention from the gender aspect of the candidates. In the male and female leader history condition, respondents are further given a male or female name of the party leader who is retiring.

Respondents are then presented with two biographies (of Sarah Coleman and John Smith) which are matched as closely as possible on relevant criteria (education, occupation and volunteering). The names are randomised to prevent the biographies from having an effect. After each biography, the participants are asked to indicate on a 5-point scale (strongly disagree to strongly agree) whether they agree that the candidate would be suitable, has the skills and experience to lead other people and cares about the overall state of the city. Lastly, they are asked which candidate they would like to be the new party leader on a 6-point scale.

Participants are then asked to provide some general demographic information. I further probe respondents for suspicion by asking whether they have an idea what the survey could have been about. Based on the feedback, the survey seems to have been clear and comprehensible for the participants.

### 3.3.2 Variable Descriptions

#### Response Variables

My key response variable in the experiment is the choice of party leader. This is measured by asking: "Which candidate would you like to be the new party leader?" Respondents can choose between the female candidate (Sarah Coleman) and the male candidate (John Smith). To further examine whether the glass cliff phenomenon also has an effect on candidate evaluations, I add three more dependent variables. Respondents are asked to indicate their level of agreement with the following statements on a 5-point Likert scale. The candidate would be suitable for the position (leadership suitability). The candidate has the skills and experience to lead other people (leadership skills). The candidate cares about the overall state of the city (stereotypically feminine trait).

#### **Explanatory Variables**

My main explanatory variable is the assignment to the good and bad performance condition. I mention that the party lost or won the previous election and is expected to perform well or poorly in the upcoming election. This measure was chosen because a party's vote share is the most important indicator of its popularity among the population. Additionally, I add a leadership history condition to each performance to see whether the gender of previous leaders has any effect beyond the performance of the party. I further test whether the gender of the respondent has an influence on the choice of party leader.

#### 3.3.3 Method

The data on they key response variable (candidate choice) is analysed with a factorial analysis of variance (ANOVA). An ANOVA is applicable since I treat my explanatory variables (assignment to experimental group, gender of respondent and history of leadership) as categorical and my response variable (choice of candidate) as continuous. A factorial ANOVA allows me to draw inferences by comparing group means to each other while also examining main and interaction effects. I subsequently employ a Tukey Multiple Comparison Test to examine which particular pairs cause that difference.

Alongside my key response variable, I am also assessing evaluations of candidates across groups. Since my dependent variables (suitability, leadership skills and care) are categorical, I employ a Kruskal-Wallis test which does not assume normality contrary to an ANOVA. Since the test only shows whether there is a difference in the median of evaluations between groups, but does not provide information on which groups drive that effect, I also apply the Dunn test as a post-hoc method with adjusted p-values.

## 4 Results - Observational Study

## 4.1 Descriptive Statistics

Before I examine which factors influence the likelihood of a woman becoming the party leader, it is important to contextualise how frequently female party leadership occurs across different groups. As expected, male party leaders still remain the status quo across countries (Table 3). Within the examined countries, female party leaders only account for around 13% of the 445 leaders selected. <sup>1</sup> While the first female party leader was already selected in 1969 in Israel, Figure 1 shows that around 80% of female party leaders were appointed after 1990 and more than 50% after the year 2000. Thus, there has been a clear increase in female leadership in the last decades.

Table 3: Frequency of Party Leadership per Gender, 1969 - 2012

Party Leader	Frequency	Percentage
Male	389	87.4
Female	56	12.6
Total	445	100

<sup>&</sup>lt;sup>1</sup>Due to the cleaning of the data, two female party leaders were excluded from the analysis. Tzipi Livni, former leader of the Israeli party Kadima, had to be removed because the party was founded in 2005 and consequently did not have data on a change in vote share in 2008. Pia Kjaersgaard of the Danish People's Party had to be excluded for the same reason.

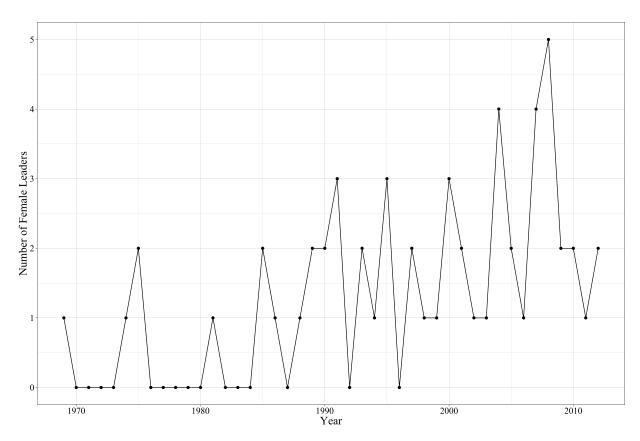


Figure 1: Frequency of Female Party Leadership between 1969 and 2012 (N=56)

When the rate of female party leaders is examined more closely, it becomes clear that there are also variations in frequency between countries (Figure 2). Some countries, like Denmark and Norway, have had female party leaders rather frequently, while other countries, like Italy and Spain, have not had any woman as the head of a party during the four decades. The data further shows that there is a match between countries with a relatively high number of female party leaders and those that have elected women to the top in the early years of women's empowerment in the political sphere. A notable exception is the United Kingdom — one of the first countries to have a female party leader and Prime Minister (Margaret Thatcher) — which is ranked in the bottom third of the sample.

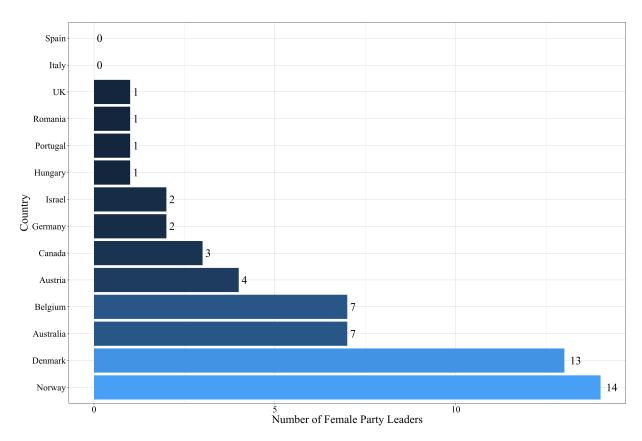


Figure 2: Frequency of Female Party Leadership per Country, 1969 - 2012 (N=56)

In line with theoretical expectations, proportional representation (PR) systems have the highest share of female party leaders with about 15.6%. However, plurality/majority systems are not performing much worse with around 2% fewer female leaders. This is followed by mixed systems (Hungary and Germany) in which 7.5% of leaders are women. Countries which have alternated between PR and mixed systems (Romania and Italy) come last with 1.6%. However, since electoral systems are spread very unevenly, conclusions should be drawn with caution since it is likely that other factors may play a more important role.

Table 4: Frequency of Female Leadership per Electoral System, 1969 - 2012

Electoral System Family	Female Leaders	s All Leaders	Percentage
PR	41	262	15.6
Plurality/Majority	11	82	13.4
Mixed	3	40	7.5
PR/Mixed	1	61	1.6
Total	56	445	

There are also differences in the frequency of female party leadership across party families (Table 5). Green parties have selected the highest proportion of female party leaders with around 29%. This percentage even underestimates the frequency of female leadership because several Green parties (such as die Gruenen in Germany and Ecolo and Groen in Belgium) have a collective leadership which usually includes at least one female candidate. Interestingly, the radical right has the second highest proportion of female party leaders with about 20%. Contrary to expectations, the radical right has selected female leaders more frequently than the radical left (16.7%). Liberal Democrats are ranked third with about 18% of leaders being women. Interestingly, Social Democratic parties even have a slightly smaller share of female party leaders than Conservatives (9.1% and 10.2%) respectively). Many prominent Social Democratic parties, like the UK Labour party, have never had a female party leader and others, like the German SPD, have only recently elected their first woman to the highest position. Regionalists have never selected any female party leader, although they have roughly appointed as many total party leaders as Green parties (14 and 15 respectively). Based on Table 6, there does not seem to be a clear left-right division in terms of female party leadership. In fact, parties in the centre seem to have the highest proportion of female leaders with around 13.5%.

Table 5: Frequency of Female Leadership per Party Family, 1969 - 2012

Party Family	Female Leaders	All Leaders	Percentage
Greens	4	14	28.6
Radical Right	6	30	20
Liberal Democrats	14	80	17.5
Radical Left	5	30	16.7
Conservatives	17	166	10.2
Social Democrats	10	110	9.1
Regionalists	0	15	0
Total	56	445	

Table 6: Frequency of Female Leadership on the Left-Right Spectrum, 1969 - 2012

Left-Right Position	Female Leaders	All Leaders	Percentage
Centre	20	148	13.5
Right	18	148	12.2
Left	18	149	12.1
Total	56	445	

Another party characteristic which is particularly relevant to an analysis of the glass cliff is the type of selectorate a party uses to elect their leadership. It can range from more inclusive procedures (meaning many party members are eligible) to very exclusive measures (such as being appointed by a single person). Table 7 indicates that parties with more inclusive mechanisms of leadership selection (party members and delegates) tend to be more likely to have a female party leader. However, although the first selection type includes a much greater share of the party, the percentage of female leaders does not differ

much from parties with delegates as selectors (14.5% and 13.4% respectively). Parties with a parliamentary caucus are also not too far off with about 11.6% female leaders. Women's likelihood to be elected by a parliamentary council tends to be much lower with around 6.4% of leaders being female. When an incumbent selects the new leader or someone appoints themselves, women face the greatest hurdles and are not elected at all.

It needs to be mentioned, however, that more inclusive mechanisms have become much more frequent in the past two decades which may have just coincided with women's advancement to political leadership (see Figure 2). Additionally, calls for more inclusive party politics came at a time when women's role in society become more diverse in general.

Table 7: Frequency of Female Leadership per Selectorate, 1969 - 2012

Selectorate	Female Leaders	All Leaders	Percentage
Party Members/Voters	16	110	14.5
Delegates to Party Convention	32	238	13.4
Parliamentary Caucus	5	43	11.6
Parliamentary Council	3	47	6.4
Self-Appointed/Appointed by Incumbent	0	7	0
Total	56	445	

A brief examination of the party performance prior to the appointment of a party leader shows that female party leaders are, on average, appointed when the party has performed slightly worse during the previous election (Table 8). However, the data also shows that the difference in performance for male and female leaders is not substantial and that there are huge variations between parties.

Table 8: Average Vote Share Change Before Appointment of Party Leaders, 1969 - 2012

Gender	Mean	Median	SD	Min - Max
Female	-2.04	-1.88	5.93	-26.9 to 9.5
Male	-1.31	-0.76	6.36	-38.6 to 24.9

Based on the descriptive statistics, I can draw the preliminary conclusions that women's representation in political leadership has increased since the 1990s, PR systems tend to have a slightly higher share of female political leaders, there are no clear left-right divisions concerning female leadership, inclusive selectorates are conducive to women's election and the performance of a party is slightly worse prior to the appointment of a female party leader.

### 4.2 Inferential Models

As previously discussed in the section on data and methods, the longitudinal nature of the data makes it necessary to control for serial correlation. To this end, I run several generalised estimating equation (GEE) models with either an autoregressive term or an exchangeable correlation structure. As can be seen in Table 9, there are only small differences between the autoregressive and the exchangeable correlation structure models in terms of the coefficients, but not with regards to their model fit. The country-level models have the smallest quasi-information criterion (QIC) scores which suggest that they fit the data best.

In all models, it is evident that the percentage of female MPs in a country matters for the frequency of female party leaders. A 1% increase in female MPs results in a 0.08/0.9 unit increase in the likelihood of having a female as opposed to a male party leader. The variable remains significant across different model specifications for the GEE

models, but also for standard logistic regressions and the conditional logistic regression (see Appendix B). The effect suggests that countries which are more open towards women in the political sphere have a higher proportion of women as party leaders. The variable does not specifically contribute to an explanation of the glass cliff, but merely suggests that the number of female MPs is conducive to the appointment of women regardless of the performance of the party. With more data, one could repeat the analysis for different regional subsets since this effect is likely driven by Northern European countries which have a high share of female MPs and a reasonable proportion of female party leaders.

The results show that the party performance does not seem to have an effect on the choice of party leader. Only the party-level model shows a significant effect with a 1% increase in vote share change leading to a 0.18 unit decrease in the likelihood of having a female party leader. While this effect is in line with the proposed mechanism, it is not robust to different model specifications. Moreover, the variable is significant in the least fitting model which further indicates that the result can likely be neglected. One reason why there is no effect may be that the analysis does not distinguish qualitatively between vote share changes. Future studies could employ a log-linear analysis with different cut points for party performance. A 1% decrease in vote share is likely not seen as a crisis by parties, thus it may be more appropriate to distinguish between a crisis situation, a poor performance, a steady performance, a good performance and a successful situation by for instance defining a crisis as a decrease in vote share above 8%.

The same caution should be applied when interpreting the significant interaction effect between party performance and the type of selectorate. The party-level model suggests that when the selectorate is inclusive, increasing party performance results in a 0.17 unit increase in the likelihood of a female party leader. If one only examines the selectorate, there is an even bigger positive change with inclusive selectorates having a 0.82 unit increase in the likelihood of choosing a female leader. However, as mentioned before, the results

may be due to chance since they are not robust to different specifications.

It can generally be concluded that the archival data does not provide evidence for the existence of a glass cliff phenomenon. This does not mean, however, that the phenomenon does not exist. For one, the appointment of a party leader is a relatively rare event and women have only entered the political sphere in the past few decades, which means there is still a lack of data for female party leaders. A potential remedy for this problem could be to examine a different level of politics (such as mayoral elections or other types of local elections) which should provide more data on the appointment of women. Moreover, as mentioned previously, this analysis may not have sufficiently distinguished between different types of party performance which could be done with a more sophisticated categorical data analysis. If the COSPAL data set adds more information on the resignation of the previous party leader, one may be able to draw a more accurate picture of party performance. A bad election may not be sufficient to trigger the factors that give rise to the glass cliff. Future studies may also want to include controls that hint at the state in the country such as the economic performance. Research by Ryan and Haslam (2005) has suggested that the corporate glass cliff may be dependent on the general health of the market. If this is applied to the political sphere, one could include country-level factors on the state of the country and on the popularity of the government to assess whether there is a general state of decline alongside the performance of the party.

Table 9: Generalised Estimating Equation Model Results (N=445 (92 Parties))

	Gender of party leader											
	AR	k-1	AR	<i>-</i> 1	AR	L-1	Ex	ch	Ex	ch	Ex	ch
	В	SE	В	SE	В	SE	В	SE	В	SE	В	SE
Country-level												
Electoral system (ref=PR)												
Majority/Plurality	$0.72^{\cdot}$	(0.40)			$0.75^{\cdot}$	(0.44)	$0.76^{\circ}$	(0.41)			$0.77^{\cdot}$	(0.44)
Mixed	-0.33	(0.57)			-0.42	(0.58)	-0.32	(0.57)			-0.41	(0.58)
% Female MPs	0.08***	(0.01)			0.09***	(0.02)	0.09***	(0.01)			0.09***	(0.02)
Party-level												
Leader history (ref=male)			0.49	(0.41)	-0.25	(0.47)			0.44	(0.44)	-0.28	(0.48)
Left/Right (ref=left)												
Centre			0.09	(0.36)	0.05	(0.39)			0.12	(0.37)	0.07	(0.39)
Right			-0.04	(0.37)	-0.15	(0.38)			-0.04	(0.37)	-0.14	(0.38)
Party performance	-0.01	(0.03)	-0.18*	(0.07)	-0.13	(0.09)	-0.01	(0.03)	-0.18*	(0.08)	-0.13	(0.09)
Selectorate (ref=exclusive)			$0.82^{*}$	(0.42)	0.71	(0.48)			0.81	(0.42)	0.70	(0.49)
Selectorate*performance			$0.17^{*}$	(0.08)	0.13	(0.09)			$0.18^{*}$	(0.08)	0.12	(0.09)
Constant	-3.96***		-2.69***		-4.53***		-4.02***		-2.71***		-4.58***	
Constant Solution Constant Con	306		343		313		306		343		313	

p < 0.10, p < 0.05, p < 0.01, p < 0.01, p < 0.001

## 5 Results - Experimental Study

## 5.1 Experimental Sample

Since archival data can only establish correlational evidence, I now turn to an examination of the experimental data. Overall, 865 respondents answered the survey which got reduced to 625 after removing subjects who did not complete the whole survey, removing respondents who failed the attention check, who were more than one standard deviation below the mean of the survey duration or who identified as Independents. Even after the data cleaning, the samples are relatively balanced across the different conditions (Table 10).

The sample is a bit unbalanced across genders with 57.76% being male, 41.28% being female and 0.96% identifying as other or preferring not to answer. With regards to the race, the data shows that Caucasian Americans are overrepresented in the sample, composing 74.88%. Asian Americans are also slightly overrepresented with 8.80% whereas African Americans and Hispanic Americans are underrepresented (7.84% and 6.24% respectively). 2.24% identify as other or did not answer the question. Thus, it needs to be taken into account that more marginalised racial groups are underrepresented while the majority group is overrepresented. The literature does not hint at race-specific effects, however, the percentages imply that the sample is not fully representative.

When it comes to age, the respondents are on average younger than US citizens, ranging from 19 to 70 years with a mean age of around 36. As the lowest educational qualification, 0.64% of the sample took some high-school classes and 10.08% received their high-school certificate. 30.72% have at least some college experience while 43.04% even have a bache-

lor's degree and 15.2% a master's or higher. This means that the MTurk sample is more educated than the average population. In terms of political identification, 63.84% identify as Democrat while 36.16% view themselves as Republican. Almost 20% of the original sample are Independents who had to be excluded from the study. As expected, the sample is generally a bit younger, whiter, educated and left-leaning than the general population which should be considered when interpreting the results.

## 5.2 Main Results of the Experiment

#### Ranking of Candidates

Before conducting the analysis, I first examine the counts of candidate choices for each condition which can be seen in Table 10. As expected, male candidates are slightly preferred in both the control condition (52.81%) and the good performance condition (52.94%) which conforms with the think manager-think male argument. In line with the glass cliff hypothesis, the female candidate is preferred when a political party is performing badly (57.14%). It is further not surprising that a female leader is chosen when the good performance of a party is associated with other female leaders (57.14%). There are, however, a few findings which are rather counter-intuitive. If the good performance of a party is associated with male leaders, the female candidate receives more support (53.76%). Additionally, when female leaders have caused the bad performance women are still preferred and when male leaders are associated with a bad performance the male candidate is preferred (52.87% and 53.41%) respectively. It may have been the case that the gender component was too obvious in the leader history conditions which induced respondents to reply contrary to what has been suggested by the literature.

Table 10: Candidate Choice in the Experiment

Experimental condition	Femal	e candidate	Male candidate		Total
Experimental condition	Count	%	Count	%	Count
Control	42	47.19	47	52.81	89
Good performance	40	47.06	45	52.94	85
Good performance — female leaders	52	57.14	39	42.86	91
Good performance — male leaders	50	53.76	43	46.24	93
Bad performance	52	57.14	39	42.86	91
Bad performance — female leaders	46	52.87	41	47.13	87
Bad performance — male leaders	41	46.59	47	53.41	88
Total					624

To test whether the gender of the respondent, the leadership history and the party performance affect the choice of candidate, I further conduct a factorial analysis of variance (ANOVA) which can be seen in Table 11. The F-value of the interaction between the gender of the respondent and the performance of the party reaches conventional levels of statistical significance (p-value of 0.026). This means that the effect of the performance on the choice of party leader depends on the gender of the respondent. The performance of a party does not seem to matter by itself, however. Additionally, the history of party leadership does not seem to have an effect at all which may be due to the fact that gender was too salient in that condition. This would also explain why male candidates were preferred in the "bad performance, male history" condition and women in the "bad performance, female history" condition.

When an ANOVA shows that group means differ, the Tukey Multiple Comparison Test is recommended to examine which pairs cause that difference. If the interaction between gender and performance is examined more closely, it becomes clear that the effect is driven by the difference between female and male respondents in the control group with a difference score of 1.02 and a p-value below 0.02. Apart from that, only the difference in means (0.26) between female and male respondents in general is statistically significant with a p-value of 0.037. This suggest that in this case the main effect is more important than the interaction since the performance effect was driven by the control. I consequently do not find any evidence for the existence of a glass cliff. It can only be said that women are more likely to choose female political leaders.

Table 11: Result of the Factorial ANOVA for the Experiment

Variable	DF	SS	F value	Sig
Gender	1	10.2	4.36	*
Performance	2	1.9	0.41	
Leader history	2	4.5	0.96	
Gender: Performance	2	17	3.63	*
Gender: Leader history	2	0.8	0.18	
Performance: Leader history	2	8.8	1.89	
Residuals	606	1415	2.335	

#### **Evaluation of Candidates**

To examine whether different party performances change how male and female leaders are evaluated, I asked respondents to rank the candidates on a 5-point agreement scale in terms of the suitability for the position, leadership skills and how much they care about the city. Table 12 shows that most conditions indicate minor differences in evaluations which may be due to the fact that respondents were not given a lot of information about the candidates. Interestingly, women are evaluated much more favourably than men in terms

of how suitable they are (4.08 compared to 3.92) and how much they care (4.24 compared to 4.10) in the bad performance condition which is in line with the glass cliff hypothesis. Surprisingly, the female leader is also evaluated more positively in the good performance condition with a male leadership history in terms of suitability (3.97 compared to 3.83), skills (3.98 compared to 3.77) and care (4.12 compared to 4). Since descriptive statistics only provide preliminary evidence, I now turn to an inferential analysis of the data.

Table 12: Candidate Evaluations in the Experiment

Characteristics	Ι	Mean		SD	Mi	Min - Max	
	Female	Male	Female	Male	Female	Male	
Control							
Suitability	4.15	4.10	0.67	0.62	2 - 5	2 - 5	
Skills	4.15	4.18	0.75	0.68	2 - 5	2 - 5	
Care	4.18	4.19	0.65	0.69	2 - 5	2 - 5	
Good performan	ice						
Suitability	4.05	4.02	0.65	0.76	1 - 5	1 - 5	
Skills	3.95	4.15	0.74	0.78	2 - 5	1 - 5	
Care	4.25	4.21	0.60	0.69	3 - 5	2 - 5	
Good performan	ice — fema	le leader	S				
Suitability	3.99	4.00	0.81	0.70	1 - 5	2 - 5	
Skills	4.03	4.02	0.84	0.77	1 - 5	1 - 5	
Care	4.13	4.15	0.81	0.61	1 - 5	2 - 5	
Good performan	1ce — male	leaders					
Suitability	3.97	3.83	0.73	0.72	1 - 5	2 - 5	
Skills	3.98	3.77	0.92	0.91	1 - 5	1 - 5	
Care	4.12	4.00	0.64	0.79	2 - 5	1 - 5	
Bad performanc	$\mathbf{e}$						
Suitability	4.08	3.92	0.54	0.64	2 - 5	1 - 5	
Skills	4.01	3.99	0.80	0.66	1 - 5	2 - 5	
Care	4.24	4.10	0.56	0.67	3 - 5	3 - 5	
Bad performanc	${ m efemale}$	e leaders					
Suitability	4.03	3.92	0.75	0.66	1 - 5	2 - 5	
Skills	4.01	3.97	0.84	0.87	2 - 5	1 - 5	
Care	4.11	4.17	0.83	0.61	1 - 5	3 - 5	
Bad performanc	e — male l	eaders					
Suitability	3.84	3.85	0.80	0.78	1 - 5	1 - 5	
Skills	3.78	3.86	0.85	0.92	1 - 5	1 - 5	
Care	4.06	4.09	0.73	0.72	1 - 5	2 - 5	

To test whether the performance of a party affects evaluations of candidates per gender, I use the assignment to an experimental group as my independent variable and evaluations of candidates with regards to suitability, skills and care as my dependent variables. I conduct a Kruskal-Wallis test because my dependent variables are ordinal and thus do not meet the normality assumption of an ANOVA. The test indicates that there is only

a significant difference in the median of leadership skill evaluations of the male candidate between groups. To further test which treatment groups are, in fact, different from each other, I run a Dunn test with p-values adjusted with the Benjamini-Hochberg method. The test shows that the difference is mostly driven by comparisons between the control group and the good performance group with the male leadership history (z-score of 3.097 and adjusted p-value of 0.04) and the good performance group and once again the good performance group with male leaders (z-score of 3.084 and adjusted p-value of 0.02). The analysis of candidate evaluations thus remains inconclusive with regards to the glass cliff.

Table 13: Kruskal-Wallis Test of Candidate Evaluations

Characteristic	Chi-Square	DF	p-value
Female leaders			
Suitability	8.47	6	0.21
Skills	10.56	6	0.10
Care	4.32	6	0.63
Male leaders			
Suitability	11.12	6	0.08
Skills	15.24	6	0.02
Care	4.90	6	0.56

## 6 Conclusion

In this thesis, I have tested whether the glass cliff phenomenon goes beyond the corporate sphere and also applies to the political world. More precisely, I studied the phenomenon with archival data by testing whether a negative change in vote share in the previous election leads to an increased likelihood of choosing a female party leader. I then conducted a survey experiment about a local party leader election which further tested whether the gender of the respondent and the leadership history matter for the appointment of a female party leader. I have found neither substantial archival nor experimental evidence for the existence of the glass cliff. Only hypothesis 5, that women are more likely to choose female party leaders than men in any condition, can be confirmed with experimental data. However, the interaction between the gender of the respondent and the performance of a party remained inconclusive. Additionally, the candidate evaluations in the experiment provide some suggestive evidence that women are evaluated more positively in the bad performance condition which could hint at a think crisis-think female mindset. However, such a mechanism would have to be investigated more thoroughly in a psychological stereotyping study.

## 6.1 Limitations of the Study

Although the results have been derived from different data sources, this does not necessarily indicate that the glass cliff does not exist. There are a number of limitations for both analyses which may have prevented me from discovering the glass cliff phenomenon.

Concerning the archival study, the data set was rather limited due to the small proportion of female party leaders in the last decades. To increase the scope, one could move down in abstraction and examine the local level, such as mayoral elections. In that case, there may also be more meaningful indicators for bad and good performance since the economic state of a city can act as a proxy for a crisis situation.

Based on the experimental evidence, it would have further been useful to test the effect of the gender balance among the selectorate on the appointment of party leaders. Psychological research suggests that women are more likely to appoint other women to leadership positions regardless of organisational performance due to in-group biases. Men, on the other hand, are more likely to appoint female leaders to poorly performing organisations. Since political selectorates have become increasingly inclusive over the past decades, this may suggest that one of the key differences between leadership in the corporate and political sphere is the appointment mechanism as well as the gender imbalance among selectors. I was unfortunately unable to test this mechanism with archival data due to a lack of information. More generally, it may also be more appropriate to use categorical data analysis to meaningfully distinguish between different types of performances. This would allow to examine whether a certain cut-off point produces the political glass cliff, such as a 5% loss in vote share.

While the experiment allowed for a more controlled research design, there are still a number of limitations which need to be mentioned. First, I conducted my survey experiment on a convenience sample which is generally more educated, whiter, younger and left-leaning than the general US population. This suggests that respondents may have been more aware of their gender biases and answered in line with those. To account for this, I probed respondents for suspicion and the great majority did not have an idea what the experiment was about. Some respondents mentioned, however, that it may have been about gender and politics, gender biases and gender cues. This needs to be taken into

account when examining the results. As a potential solution, a future study could conduct a between-participant design to make gender less salient. This was not possible this time due to a lack of funding since such a design requires even more conditions. It also needs to be mentioned that party leaders are not as relevant in the US as they are in Europe which may have reduced the realism of the experiment. I attempted to mitigate this fact by conducting an experiment on a local level, however, this may have led respondents to think that the situation was not as relevant.

### 6.2 Avenues for Future Research

While this study was unable to replicate the glass cliff effect, this does not mean that future research should neglect this field of study. In fact, particularly qualitative research, can allow for an in-depth analysis of particular glass cliff cases, such as the party leader of the German SPD. Interviews with female politicians could help to find out whether a men was preferred for the position but turned it down and why women decided to take the precarious position (such as having no other option or feeling obliged to save the party). Since the number of female political leaders is still limited, case studies may provide a better understanding of the exact mechanisms which can then be tested in a larger N study. This may be particularly useful with regards to identifying appropriate proxies for good and bad performance in the political sphere. If women are perched on a glass cliff, it is likely that the driving factors are subtle and difficult to find. Given the persistent underrepresentation of women among top ranks, it is important to unravel those mechanisms if they are there.

## Appendix A

## Experimental Design

#### Identification

Q73 Generally speaking, do you usually think of yourself as a Republican, a Democrat or as an Independent?<sup>1</sup>

(1) Strong Democrat (2) Weak Democrat (3) Independent Democrat (4) Independent (5) Independent Republican (6) Weak Republican (7) Strong Republican

#### **Experimental conditions**

#### Q88 - Control<sup>2</sup>

Suppose you have just moved to a new city and would like to inform yourself about local politics. You find out that a mayoral election is coming up.

The party leader of the local [Democratic/Republican] party has recently decided to retire. Four candidates are now competing for the vacant position of party leader. You are introduced to two of them.

<sup>&</sup>lt;sup>1</sup>This question is used to condition further responses as either Republican or Democrat and to send Independents to the end of the survey.

<sup>&</sup>lt;sup>2</sup>I had to design fourteen blocks of questions to alternate biographies in each of the seven conditions, so "Q88" is merely the number of one of the control texts and serves as an example.

#### Q102 - Good performance control

Suppose you have just moved to a new city and would like to inform yourself about local politics. You find out that a mayoral election is coming up. The candidate of the [Democratic/Republican] Party won the previous local election by a large margin. In the upcoming mayoral election, the [Democratic/Republican] party is expected to achieve good results once again.

The party leader of the local [Democratic/Republican] party has recently decided to retire. Four candidates are now competing for the vacant position of party leader. You are introduced to two of them.

#### Q18 - Good performance male leader history

Suppose you have just moved to a new city and would like to inform yourself about local politics. You find out that a mayoral election is coming up. The candidate of the [Democratic/Republican] Party, Scott Davis, won the previous local election by a large margin. In the upcoming mayoral election, the [Democratic/Republican] party is expected to achieve good results once again.

The party leader of the local [Democratic/Republican] party, Andrew Turner, has recently decided to retire. Four candidates are now competing for the vacant position of party leader. You are introduced to two of them.

#### Q4 - Good performance female leader history

Suppose you have just moved to a new city and would like to inform yourself about local politics. You find out that a mayoral election is coming up. The candidate of the [Democratic/Republican] Party, Susan Johnson, won the previous local election by a large margin. In the upcoming mayoral election, the [Democratic/Republican] party is expected to achieve good results once again.

The party leader of the local [Democratic/Republican] party, Katherine Young, has recently decided to retire. Four candidates are now competing for the vacant position of

party leader. You are introduced to two of them.

#### Q32 - Bad performance control

Suppose you have just moved to a new city and would like to inform yourself about local politics. You find out that a mayoral election is coming up. The candidate of the [Democratic/Republican] Party **lost** the previous local election **by a large margin**. In the upcoming mayoral election, the [Democratic/Republican] party is expected to achieve poor results once again.

The party leader of the local [Democratic/Republican] party has recently decided to retire. Four candidates are now competing for the vacant position of party leader. You are introduced to two of them.

#### Q46 - Bad performance male leader history

Suppose you have just moved to a new city and would like to inform yourself about local politics. You find out that a mayoral election is coming up. The candidate of the [Democratic/Republican] Party, Scott Davis, **lost** the previous local election **by a large** margin. In the upcoming mayoral election, the [Democratic/Republican] party is expected to achieve poor results once again.

The party leader of the local [Democratic/Republican] party, Andrew Turner, has recently decided to retire. Four candidates are now competing for the vacant position of party leader. You are introduced to two of them.

#### Q60 - Bad performance female leader history

Suppose you have just moved to a new city and would like to inform yourself about local politics. You find out that a mayoral election is coming up. The candidate of the [Democratic/Republican] Party, Susan Johnson, **lost** the previous local election **by a large margin**. In the upcoming mayoral election, the [Democratic/Republican] party is expected to achieve poor results once again.

The party leader of the local [Democratic/Republican] party, Katherine Young, has

recently decided to retire. Four candidates are now competing for the vacant position of party leader. You are introduced to two of them.

#### **Biographies**

#### Q90 - Male consultant

John Smith is in his 40s; he lives downtown and earned a Bachelor of Science in Business Administration from our city?s university. Ten years ago, John set up his own consulting company which now employs eight people. He raised funds for various local charities where he also regularly volunteers. Over the years, John has served our city?s [Democratic/Republican] party organization in a number of official roles.

#### Q76 - Female consultant

Sarah Coleman is in her 40s; she lives downtown and earned a Bachelor of Science in Business Administration from our city?s university. Ten years ago, Sarah set up her own consulting company which now employs eight people. She raised funds for various local charities where she also regularly volunteers. Over the years, Sarah has served our city?s [Democratic/Republican] party organization in a number of official roles.

#### Q81 - Male doctor

John Smith is in his 40s and grew up in our city where he currently lives on the outskirts. He received his Medical Doctorate from the local university. Since, he has worked as a doctor at the local hospital and also volunteers for the humanitarian organization Doctors without Borders. John has held a number of positions in the local [Democratic/Republican] party organization since becoming chair of the [Democratic/Republican] youth group at university.

#### Q95 - Female doctor

Sarah Coleman is in her 40s and grew up in our city where she currently lives on the outskirts. She received her Medical Doctorate from the local university. Since, she has

worked as a doctor at the local hospital and also volunteers for the humanitarian organization Doctors without Borders. Sarah has held a number of positions in the local [Democratic/Republican] party organization since becoming chair of the Republican youth group at university.

#### Candidate evaluation

Please indicate your level of agreement with the following statements

**Q92** The candidate would be suitable for the position.

(1) Strongly disagree, (2) Disagree, (3) Neither agree nor disagree, (4) Agree, (5) Strongly agree

Q93 The candidate has the skills and experience to lead other people.

(1) Strongly disagree, (2) Disagree, (3) Neither agree nor disagree, (4) Agree, (5) Strongly agree

Q94 The candidate cares about the overall state of the city.

(1) Strongly disagree, (2) Disagree, (3) Neither agree nor disagree, (4) Agree, (5) Strongly agree

#### Candidate choice

Q314 Which candidate would you like to be the new party leader? Where 1 shows that you clearly prefer Sarah Coleman and 6 shows that you clearly prefer John Smith.

(1 - 3) Sarah Coleman (4 - 6) John Smith

#### Attention check

Q311 An attention check is designed to ensure that people are at high attention throughout the survey or they're disqualified. (Picture of a cow)

Q357 What do you see in the picture?

(1) Cow (2) Piano (3) Bike (4) Freezer (5) Phone (6) Car (7) Book (8) Table

#### Demographic

Q230 What is your employment status?

(1) Unemployed (2) Self-employed (3) Student (4) Employed part-time (5) Employed full-time (6) Retired (7) Prefer not to say

**Q231** What is your race?

(1) African American (2) Caucasian (3) Hispanic (4) Asian (5) Other

Q232 What is the highest level of education you have completed?

(1) Some high school (2) High school degree/GED (3) Some college (4) Bachelor degree

(5) Master degree (6) PhD/JD/MD

**Q233** What is your gender?

(1) Male (2) Female (3) Other (4) Prefer not to say

Q234 What is your age?

#### Suspicion

Q256 Do you have any idea what the survey could have been about?

#### Feedback

Q310 If you have any suggestions or if something is not clear or did not work in the survey, please report it in the box.

# Appendix B

Observational Data Analysis

Table 14: Logit and Clogit Results (N=445 (92 Parties))

	Gender of party leader											
		Logit			Logit			Logit		-	Clogit	
	В	$\exp(B)$	SE	В	$\exp(B)$	SE	В	$\exp(B)$	SE	В	$\exp(B)$	SE
Country-level												
Electoral system (ref=PR)												
Majority/Plurality	$0.76^{\circ}$	2.15	(0.41)				0.78	2.18	(0.44)			
Mixed	-0.38	0.69	(0.56)				-0.47	0.63	(0.57)			
% Female MPs	$0.09^{***}$	1.09	(0.02)				$0.09^{***}$	1.09	(0.02)	$0.12^{***}$	1.13	0.03
Party-level												
Leader history (ref=male)				0.52	1.69	(0.43)	-0.27	0.76	(0.46)	-2.12***	0.12	(0.59)
Left/Right (ref=left)												
Centre				0.11	1.12	(0.35)	0.10	1.11	(0.37)			
Right				-0.02	0.98	(0.36)	-0.14	0.87	(0.38)			
Party performance	-0.01	0.99	(0.03)	-0.21	0.81	(0.12)·	-0.15	0.86	(0.13)	-0.04	0.96	(0.04)
Selectorate (ref=exclusive)				$0.84^{\circ}$	2.32	(0.48)	0.73	2.07	(0.52)			
Selectorate*performance				$0.20^{\cdot}$	1.23	0.12	0.14	1.15	(0.14)			
Constant				-2.78***			-4.62***					
Constant  Model fit  AIC  LRT	304.9			343.5			311.7			39.6***	3 DF	

p < 0.10, p < 0.05, p < 0.01, p < 0.01, p < 0.001

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